MH-60S Fleet Combat Support Helicopter

The MH-60S Fleet Combat Support Helicopter is the replacement for the current CH-46D, most of which have exceeded their original service life. The primary mission of the baseline MH-60S configuration is to provide the Navy's Combat Logistic Force with: responsive vertical replenishment, vertical onboard delivery, ship-to-shore airhead support, and Amphibious Task Force search and rescue. Secondary missions include Special Warfare Support (over water), aero medical evacuation, and noncombatant evacuation. A second MH-60S configuration planned for FY06, the Armed Helicopter, will support Combat Search and Rescue, Anti-Surface Warfare, and Aircraft Carrier Plane Guard missions. A third MH-60S configuration also planned for FY06 will support the Organic Airborne Mine Countermeasure mission.

The MH-60S is an Army UH-60L Black Hawk airframe incorporating more rugged Navy Seahawk GE T700-401C engines, transmission/drive train, stabilator, flight controls, and a folding rotor head and tail pylon. It uses the Common Cockpit design that consists of multi-functional displays and an open architecture client-server based tactical data processing system. MH-60S avionics include: dual UHF/VHF transceivers, dual embedded Global Positioning System/ inertial navigation systems, and night vision device-compatible heads-up displays. The Armed Helicopter configuration will also include tactical moving maps, a forward-looking infrared sensor with a laser range finder/target designator, crew-served side suppression weapons, Hellfire missiles, forward firing guns/rockets, and an integrated self-defense system. The Airborne Mine Countermeasure configuration will incorporate a Tactical Common Data Link, a sensor workstation, a winch and tether/towing system, and one of five mine detection sensors or destructors currently under development.

TEST & EVALUATION ACTIVITIES

The Operational Evaluation of the MH-60S baseline configuration was conducted from October 24, 2001, through March 7, 2002. Two dual aircraft detachments accumulated 124 flight hours of test from aircraft carriers, amphibious-assault ships, and combat logistics ships. An additional 210 flight hours of test occurred at land-based test and operating sites. Both static and dynamic tests were conducted on aircraft components and the YCH-60 test aircraft as part of the joint Live Fire Test and Evaluation (LFT&E) program. Testing was conducted at the Army's Aberdeen Proving Ground, Aberdeen, Maryland and at the Naval Air Warfare Center, China Lake, California. A revision of the Operational Requirements Document (ORD) for Airborne Mine Countermeasure aircraft has been approved. A revision of the Test and Evaluation Master Plan to reflect the updated ORD is in progress.

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TEST & EVALUATION ASSESSMENT

The Operational Evaluation of the MH-60S was considered an adequate test of the helicopter and its ability to complete assigned missions. The MH-60S was determined to be operationally effective and survivable, but not suitable. The baseline-configured MH-60S successfully accomplished primary and secondary missions, constrained only by its 350-gallon fuel capacity. DOT&E recommended in the August 2002 Beyond Low-Rate Initial

Production (BLRIP) Report that sufficient quantities of 200-gallon, internal auxiliary fuel tanks be procured by the Navy to accomplish current missions requiring extra fuel, as directed by Task Force Commanders.

The LFT&E results and legacy H-60 databases indicate that the MH-60S baseline configuration is operationally survivable in its intended operational environment. The MH-60S is a damage-tolerant aircraft that can withstand multiple small-arms projectile hits, continue to fly, and often complete its mission in spite of incurred damage. The data from the joint LFT&E program are adequate to evaluate the survivability of the MH-60S while conducting its other wartime missions.

The MH-60S was not operationally suitable due to excessive administrative and logistic delay time experienced awaiting spare parts to repair legacy and MH-60S-unique component failures. The aircraft was reliable during the conduct of Operational Test & Evaluation; however, when failures did occur, necessary spare parts were not readily available. DOT&E recommended in the BLRIP Report that the Navy take action to correct the deficiency and ensure adequate logistics were available to support the intended rapid introduction of the MH-60S into the Fleet.